

USB-C Interface Protection

OBJECTIVE

USB-C is a versatile connector that allows devices to communicate in many ways: transferring data, powering equipment and outputting video. USB-C supports different standards such as USB2.0, USB3.0 and USB3.1 2nd Gen as well as third party protocols "alternate mode" Display-Port and HDMI.

BENEFIT

The integrated TVS diode array solution safeguards devices from voltage spikes, including surges caused by cables being removed improperly. Using transient voltage suppressors on V_{bus} lines and ultra-low capacitance steering diode/thyristor arrays on data lines, provides ideal results.

COMPLIANCE

- IEC 61000-4-2 (ESD)
- IEC 61000-4-4 (EFT)
- IEC 61000-4-5 (Surge)

SOLUTIONS

PRT0504LC for Data lines

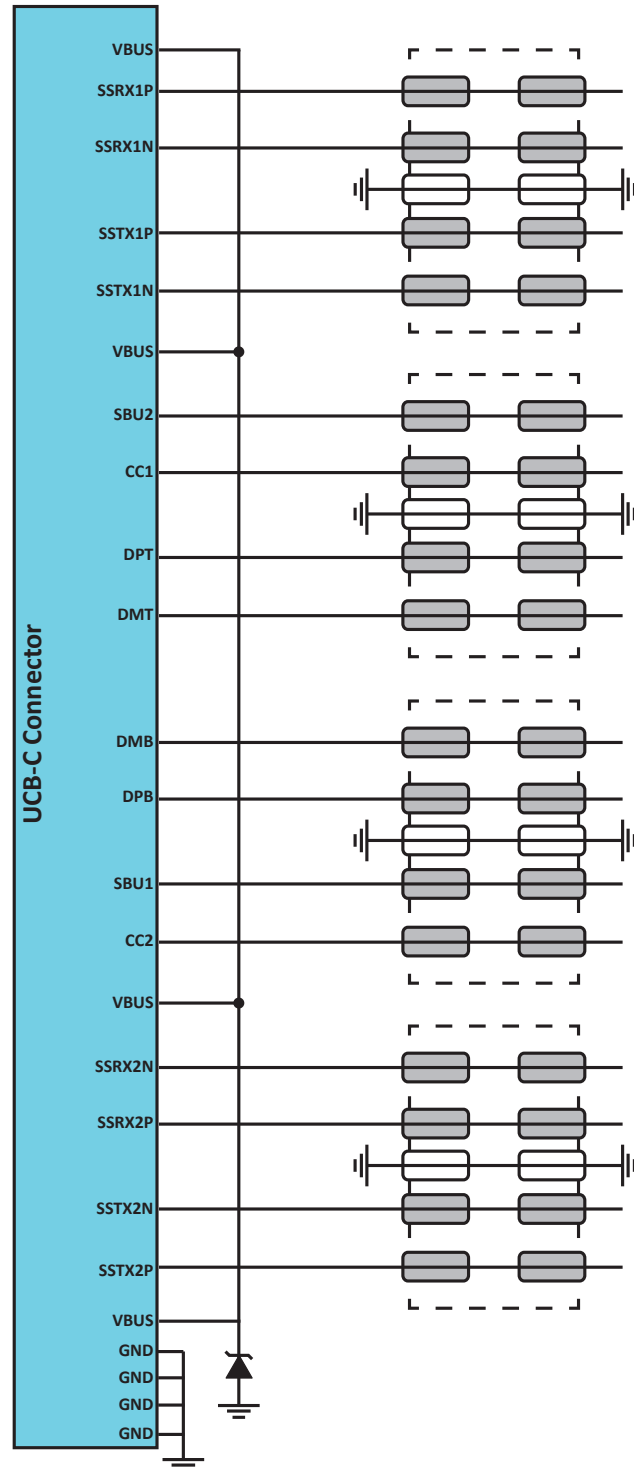
- Stand-Off Voltage V_{WM} : 5V
- Break-Down Voltage V_{BR} : 6.2V
- V_C & I_P : 6V @ 3A
- Leakage Current IR: 0.05nA
- Maximum Capacitance: 0.4pF I/O to Gnd

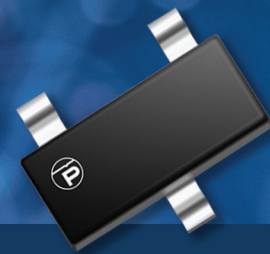
PVCOM24 for V_{bus} Power Delivery

- Stand-Off Voltage V_{WM} : 24V
- Break-Down Voltage V_{BR} : 26V
- V_C & I_P : 45V @ 37A

PSD05 for V_{bus} Data Transfer

- Stand-Off Voltage V_{WM} : 5V
- Break-Down Voltage V_{BR} : 6V
- V_C & I_P : 9.8V @ 1A





USB-C Interface Protection

COMPANY PROFILE

In business more than 30 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of over-voltage protection that include Transient Voltage Suppressor (TVS) Arrays, Steering Diode Array Hybrids, High-power Components and Modules, as well as Steering Diodes, EMI Filter/TVS Arrays and Thyristor Surge Suppressors. These components deliver circuit protection in electronic systems from numerous overvoltage events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices is an ISO 9001 certified company.

CONTACT US

Corporate Headquarters

2929 South Fair Lane
Tempe, Arizona 85282
USA

Web

www.protekdevices.com



Singel 3 | B-2550 Kontich | Belgium | Tel.+32(0)3 458 30 33
info@alcom.be | www.alcom.be
Rivium 1e straat 52 | 2909 LE Capelle aan den IJssel | The Netherlands
Tel.+31(0)10 288 25 00 | info@alcom.nl | www.alcom.nl